



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/825,332 Confirmation No. : 7895  
First Named Inventor : Norbert ERHARD  
Filed : April 16, 2004  
TC/A.U. : 3752  
Examiner— : T. MCGRAW  
  
Docket No. : 028972.53933US  
Customer No. : 23911  
  
Title : Spray Head for a Spraying Tool

**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**Mail Stop: Appeal Brief - Patents**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The following Appeal Brief is submitted further to Applicants' November 6, 2006 Notice of Appeal to the Board of Patent Appeals and Interferences from the July 5, 2006 final rejection of claims 10-17 and 19.

**I. REAL PARTY IN INTEREST (37 C.F.R. § 41.37(c)(1)(i))**

The real party in interest is Oskar Frech GmbH + Co. KG, Schorndorfer Strasse 32, 73614 Schorndorf, Germany, a German company, by virtue of an assignment recorded at Reel 015224, Frame 0075.

## II. RELATED APPEALS AND INTERFERENCES (37 C.F.R. § 41.37(c)(1)(ii))

Appellants are not aware of any interferences or other appeals that would affect, be affected by, or have a bearing on a decision in this Appeal.

### III. STATUS OF CLAIMS (37 C.F.R. § 41.37(c)(1)(iii))

Claims 1-9 and 18 have been cancelled. By this Appeal, Appellants seek review of the rejection of claims 10-17 and 19 on prior art grounds.

**IV. STATUS OF AMENDMENTS (37 C.F.R. § 41.37(c)(1)(iv))**

There are no un-entered amendments in the application.

**V. SUMMARY OF CLAIMED SUBJECT MATTER (37 C.F.R.  
§41.37(c)(1)(v))**

The invention relates to a spray head for a spraying tool and a method of making a spray head. According to the invention, the individual elements comprising the spray head can be assembled in a modular fashion without the need for using threaded bolts or the like (see, e.g., paragraph [0005] of the specification).

As recited in independent claim 10, the spray head comprises a plurality of modular spray units or bars (16,16A), a plurality of coupling elements (25), and a clamp (30) (see, e.g., Figure 3 and paragraphs [0020] and [0021]). The spray units (16,16A) each have a plurality of passages (17-19) for media that is to be sprayed, and an end having a chamber (21,21A) (see, e.g., Figure 3 and paragraphs [0020] and [0021]). The plurality of coupling elements (25) reach into the chambers (21,21A) at the ends of the spray units that are to be joined and communicate with the passages (17-19) (see, e.g., paragraph [0021]). Each coupling element (25) includes a further passage (32) and a recess having tapered surfaces (27,28) (see, e.g., paragraph [0021]). In its assembled state, clamp (30) engages the tapered surfaces (27,28) of the coupling elements (25) and presses the joined spray units (16,16A) together (see, e.g., paragraph [0021] and Figure 3).

A method of making a spray head, according to independent claim 19, comprises connecting two modular spray units (16,16A) end to end using a plurality of coupling elements (25), and pressing the joined spray units together using a clamp (30) that engages tapered surfaces (27,28) formed in a recess of each coupling element (see, e.g., paragraphs [0020] and [0021]).

Grouping of Claims

In addition to being patentable for all the reasons that also apply to claim 1, claim 17 further requires the non-obvious feature that at least one of the spray units comprises an angled piece for connecting to another spray unit. Thus, claim 17 and claims 1-16 and 19 should be grouped separately and considered independently patentable.

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL (37 C.F.R. § 41.37(c)(1)(vi))**

The following ground of rejection is on appeal:

1. Whether claims 10-17 and 19 are anticipated under 35 U.S.C. §102(b) over Wollin, US 5,916,367?

**VII. ARGUMENT (37 C.F.R. § 41.37(c)(1)(vii))**

1. The anticipation rejection of claims 10-17 and 19 should be reversed because Wollin does not teach all of the claim limitations.

Independent claim 10 relates to a spray head for a spraying tool, and independent claim 19 relates to a method of making a spray head for a spraying tool. According to both claims, the spray head is required to include a plurality of modular spray units that are pressed and joined together by a clamp that engages a tapered surface formed in a coupling element. Thus, the claimed spray head comprises at least three components: (i) the spray units to be joined (ii) a clamp, and (iii) a coupling element. In an assembled configuration, the coupling element extends into chambers formed in the ends of spray units that are to be joined, and the clamp cooperates with the coupling element to press and join the spray units together. Specifically, the clamp engages a tapered surface that is formed within a recess of each coupling element.

In order to establish anticipation under 35 U.S.C. § 102(b), all elements of the claim must be found in a single reference. MPEP § 2131. While Wollin discloses a spraying-tool head comprising a plurality of plates and modules, the reference merely teaches that the various plates and modules are threadedly

connected to each other (see, e.g., column 4, line 60 through column 5, line 12 and column 6, lines 1-6). In other words, Wollin discloses the use of conventional threaded bolts to secure the individual components together. Disadvantages associated with such an approach are discussed in the Background and Summary section of the present application.

The anticipation rejection is improper because Wollin fails to disclose a spray head assembly comprising all three of the required components. Pointedly, Wollin does not disclose a spray head comprising a coupling element, much less a coupling element that includes a passage and a recess having a tapered surface that is engaged by a clamp.

Because Wollin does not describe the claimed coupling element or the claimed relationship between a coupling element and a clamp, Wollin cannot anticipate claims 10-17 and 19 as a matter of law.

Applicants note that Wollin discloses pins 25 that penetrate into corresponding bores in mating parts in order to align the parts (column 6, lines 1-6). However, the pins are not to be equated with the claimed coupling elements. The pins are arranged only to align the parts. Moreover, the pins do not have the structural features required by the claimed coupling elements. Specifically, the pins of Wollin do not include the passage, recess, or tapered surface required by the claims, nor are they engaged by a clamp.

Unable to point to specific disclosure in Wollin of all the claimed features, the Final Action summarily asserts that all of the elements of the present claims are found in the reference. This is simply incorrect. In that regard, applicants additionally note that the Final Action fails to particularly point out where in the cited reference all of the claimed elements can be found. See 37 C.F.R. § 1.104.

Moreover, in an attempt to bolster the deficient rejection set forth in the Final Action, the Advisory Action improperly relies on boilerplate language found in Wollin, which states that elements set forth in the specification and claims may be essential to the invention by themselves *as well as in any desired form*. Such disclosure, however, is not a proper foundation for a *prima facie* case of anticipation, and can at best be the basis only for improper hindsight

reasoning. Pointedly, because Wollin does not disclose each and every element of the claims, the anticipation rejection is improper and should be reversed.

2. Claim 17 is independently patentable because the cited reference fails to teach a spray unit having an angled piece for connecting to another spray unit.

Claim 17 requires that at least one of the spray units comprises an angled piece adapted to connect to another spray unit. Exemplary angled piece 35, which has an angle of 45°, is disclosed in paragraph [0023] of the instant specification and is illustrated in Figures 1 and 4.

Wollin merely discloses an assemblage of components comprising adapter 7 affixed to a support arm 6, adapter modules 8 mounted on the right and left sides of the support arm, and a manifold plate 9 eccentrically connected to the right and the left of the adapter modules 8 (column 4, lines 60-67). There is no teaching or suggestion that any of the components taught by Wollin comprises an angled piece. Moreover, in the illustrations of Wollin, only an orthogonal arrangement of the various components is shown.

Because there is no teaching or suggestion in Wollin to provide an angled piece, claim 17 is deemed patentable.

Conclusion

Claims 10-17 and 19 stand rejected only as anticipated by Wollin. The anticipation rejection is improper, however, because Wollin fails to teach all of the claim limitations.

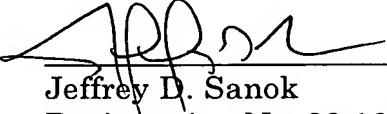
Independent claims 10 and 19 each require a coupling element that is not disclosed by Wollin. While Wollin teaches to use pins to facilitate component alignment, the pins do not include the structural features required by the claimed coupling element, nor do they cooperate with a clamp in the required manner. Pointedly, the coupling element is required to reach into chambers formed at the ends of the spray units that are being joined so as to communicate with media passages formed in the spray units. The pins of Wollin do not communicate with media passages. Furthermore, a clamp is required to engage

a tapered surface formed in a recess in the coupling element so as to press and join the spray units together. The pins of Wollin do not include a tapered surface, much less a tapered surface that is engaged by a clamp. Rather, the individual components of Wollin are held together using the conventional practice of threaded bolts.

In view of the foregoing, Appellants respectfully request the Board to reverse the Final Rejections and allow claims 10-17 and 19.

Respectfully submitted,

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**VIII. CLAIMS APPENDIX (37 C.F.R. § 41.37(c)(1)(viii))**

The following claims (10-17 and 19) are involved in the appeal:

10. A spray head for a spraying tool, comprising:

    a plurality of modular spray units each having an end and a plurality of passages for the media to be sprayed, wherein the end of each spray unit has a chamber;

    a plurality of coupling elements, which communicate with the passages and reach into both chambers at the ends of the spray units that are joined, each coupling element including a passage and a recess having a tapered surface; and

    a clamp that engages the tapered surface and presses the joined spray units together.

11. The spray head according to claim 10, wherein each coupling element has two ends and a sealing ring at each end.

12. The spray head according to claim 10, wherein each coupling element has a cylindrical configuration and two recesses, each of which has a tapered surface.

13. The spray head according to claim 11, wherein the clamp includes a screw having a conical tip which cooperates with one of the recesses.

14. The spray head according to claim 10, wherein the end of each spray unit has two chambers arranged parallel to one another.

15. The spray head according to claim 14, wherein the two chambers are coaxial with two of the passages of one of the spray units.

16. The spray head according to claim 15, wherein, between the two passages with which the two chambers are coaxial, the end of each spray unit includes a third passage.

17. The spray head according to claim 10, wherein at least one of the spray units comprises an angled piece adapted to connect to another spray unit.

19. A method of making a spray head for a spraying tool, the method comprising the acts of:

connecting two modular spray units end to end using a plurality of coupling elements, wherein each spray unit has an end and a plurality of passages for the media to be sprayed, wherein the end of each spray unit has a chamber, and wherein the coupling elements communicate with the passages and reach into both chambers at the ends of the spray units, each coupling element including a passage and a recess having a tapered surface; and

pressing the joined spray units together using a clamp that engages the tapered surface.

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**IX. EVIDENCE APPENDIX (37 C.F.R. § 41.37(c)(1)(ix))**

There is no evidence being submitted with the Appeal.

**X. RELATED PROCEEDINGS APPENDIX (37 C.F.R. § 41.37(c)(1)(x))**

There are no copies of decisions pursuant to related proceedings being submitted with the Appeal.